

AMENDMENTS TO THE CLAIMS

The following listing provides a copy of all pending claims and a status of each claim. Claims 2, 14, 6 and 7 are cancelled. Claims 1 and 12 are currently amended. These amendments to the claims add no new matter. This listing of claims will replace all prior versions of claims.

Listing of Claims

1. (Currently Amended) A system in communication with a computer network for manipulating at least one existing website displayable over the computer network, the system comprising:

a) a processor portion and a memory portion having a computer software program stored thereon that comprises steps executable by the processor portion, wherein the executable steps comprise:

i) accessing the at least one existing website as directed by a user of the system;
ii) tracing API calls by intercepting associated parameters and Internet Protocol network event data obtained from one or more application programming interfaces while accessing the at least one existing website;

iii) filtering the Internet Protocol network event data passed to and from the API calls by removing network management packets that are acknowledgements and retries, collating IP packets into single HTTP based messages; and collating HTTP based messages into single records of content objects, wherein the content objects comprise HTML, images, audio, and other HTTP content;

iv) analyzing the API calls and associated parameters and Internet Protocol network event data passed to and from the API calls;

v) producing an XML extract file comprising an XML record for each content object in temporal order of receipt, an XML redirect record and added redirect information, an XML record for cookie read, an XML record for cookie writes, an XML record for user navigation events, an XML record for HTTP header information; and one or more management information records relating to the API calls and associated parameters and Internet Protocol network event data passed to and from the API calls; and

[[iv)][vi] automatically generating a source code from the traced and filtered Internet Protocol network event data that is executable by the processor portion, and

thereby automatically generating an executable software robot that mimics the user using a web browser to access the at least one existing website; and

b) the automatically generated executable software robot stored in the memory portion for execution by the processor portion when an end user requests playback.

2. (Cancelled)

3. (Previously presented) The system of Claim 1 wherein the Internet Protocol network event data is obtainable from a group of APIs consisting of Winsock API, MICROSOFT Wininet API, MICROSOFT shell API, MICROSOFT security API, MICROSOFT User API, MICROSOFT Active Directory API, MICROSOFT HTML API, MICROSOFT DOM API and/or any combination thereof.

4. (Previously presented) The system of Claim 1 wherein the computer software program traces Internet Protocol network event data obtainable on a computer running a MICROSOFT WINDOWS operating system.

5. (Previously presented) The system of Claim 1 wherein the Internet Protocol network event data comprises data passed to and from a website browser application and/or a non-website browser application.

6. (Cancelled)

7. (Cancelled)

8. (Previously presented) The system of Claim 7 wherein the executable step of generating source code further comprises transforming the XML extract file into executable source code via XSL.

9. (Previously presented) The system of Claim 7 wherein the executable step of generating source code further comprises using a computer language to parse the XML extract file.

10. (Previously presented) The system of Claim 8 wherein XSL transforms the XML extract file into source code written in a programming language selected from a group consisting of JAVA,

JAVASCRIPT, VISUAL BASIC, COLD FUSION, C/C++, PASCAL and a plurality of other computer languages.

11. (Previously presented) The system of Claim 1 wherein the software robot is adapted to interface with the at least one existing website and automatically manipulate the at least one existing website during use.

12. (Currently Amended) A method for manipulating an existing website in communication with a computer network, the method comprising the steps of:

a) providing a system, also in communication with the computer network, comprising a processor portion and a memory portion having executable steps stored thereon for execution by the processor portion, wherein said executable steps comprise:

i) tracing API calls in temporal order between the system and the existing website and associated parameters and data associated with Internet Protocol (IP) network events passed to and from the API calls when a system user accesses the existing website;

ii) filtering the data passed to and from the API calls by removing network management packets that are acknowledgements and retries, collating IP packets into single HTTP based messages; and collating HTTP based messages into single records of content objects, wherein the content objects comprise HTML, images, audio, and other HTTP content;

iii) analyzing the data to produce an extract file comprising an XML record for each content object in temporal order of receipt, an XML redirect record and added redirect information, an XML record for cookie read, an XML record for cookie writes, an XML record for user navigation events, an XML record for HTTP header information, and one or more management information records relating to the API calls and associated parameters and Internet Protocol network event data passed to and from the API calls; and

iv) automatically generating a software robot that comprises executable source code derived from the extract file, wherein executing the source code parsed from the extract file automatically instructs the system to mimic interactions between the system user and the existing website; and

b) executing steps i) through iv), thereby automatically generating a software robot that manipulates the existing website by automatically instructing the system to mimic interactions

between the system user and the existing website and that is adapted for playback on the IP network level at the request of an end user.

13. (Previously presented) The method of Claim 12 further comprising a step following the filtering step of recording to the memory portion the API calls and associated parameters and data passed to and from the API calls.

14. (Cancelled)

15. (Previously presented) The method of Claim 12 wherein the generating step comprises prompting an end user to hard code the source code from the XML extract file.

16. (Previously presented) The method of Claim 12 wherein the generating step comprises automating the derivation of source code from the XML extract file.

17. (Previously presented) The method of Claim 12 wherein the software robot is adapted for interfacing with the existing website to automatically fill-in one or more forms on a web page; obtain information previously unattainable; to perform system testing of the website; and/or to monitor the existing website for change.

18. (Previously presented) The method of Claim 12 further comprising the step of integrating the executable steps into a website browser as a plug-in.

19. (Previously presented) The method of Claim 18 wherein the source code is adapted for interactive stepping through on a page-by-page or event-by-event basis so that debug messages adapted for providing full interactive debugging capability to the source code, HTTP header parameters, and other data are displayed in the plug-in.

20. (Previously presented) The method of Claim 12 further comprising a final step of displaying a selectable button in a web browser plug-in that automates completion of multiple forms without further user intervention.